



DOCKET NO. P05062

PATENT

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4/16/06

**SYSTEMS FOR SELECTIVELY DISABLING TIMING VIOLATIONS
IN HARDWARE DESCRIPTION LANGUAGE MODELS OF INTEGRATED CIRCUITS
AND METHODS OF OPERATING THE SAME**

SUBSTITUTE SPECIFICATION

SHIELDED ELECTRICAL CONNECTOR HAVING REDUCED HEIGHT
ABOVE CIRCUIT BOARD

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates to an electrical connector, and particularly to an electrical connector which has a reduced height above a circuit board.

2. Description of the Related Art

[0002] Personal computers, especially notebook computers, are becoming increasingly compact nowadays, so the entire space within a personal computer enclosure must be efficiently used, which becomes one of the most important design considerations for electrical connectors mounted on a circuit board in the personal computer enclosure.

[0003] Miniature DIN (mini DIN) connectors are often provided for connecting mainframes to keyboards or mice of the personal computers. When the mini DIN connectors are adapted to be used for notebook computers, insulative housings and conductive outer shields of the mini DIN connectors are always in cylindrical configurations for compactness considerations. In addition, the cylindrical mini DIN connector is often mounted to a circuit board with a front lower portion thereof located below a bottom face of the circuit board for further reducing the height thereof above a top face of the circuit board.

[0004] The cylindrical mini DIN connector is supported by the circuit board on a rear portion thereof and a front portion of the cylindrical mini DIN connector is often at the risk of downwardly moving with respect to the circuit board after long-term insertion or plugging of a complementary electrical connector, since

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